

SEQUENCE LISTING

<110> Drmanac, R.
Drmanac, S.
Kita, D.
Cooke, C.
Xu, C.

<120> ENHANCED SEQUENCING BY HYBRIDIZATION USING POOLS OF PROBES

<130> 30311/35918

<140> US 09/479,608

<141> 2000-01-06

<150> US 60/115,284

<151> 1999-01-06

<160> 71

<170> PatentIn version 3.0

<210> 1

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Hypothetical sequence

<400> 1

aaaaaaaaaaa

10

<210> 2

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Hypothetical sequence

<400> 2

acacacacac

10

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Hypothetical sequence

<400> 3

atctgtgtct gaagtagtcc

20

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 4
atctctggct gaagtagtcc 20

<210> 5
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<220>
<221> misc_feature
<222>
<223> b = C or G or T

<400> 5
bbbbbbattt cbbbbbgcac tbbbgtttg hbbacacgbb bbb 43

<210> 6
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<220>
<221> misc_feature
<222>
<223> b = C or G or T

<400> 6
bbbbbbattt gbbbacactb bbbgtttcbb bbbgcacgbb bbb 43

<210> 7
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 7
ggtctcccca 10

<210> 8
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 8
gtctcccca 10

--2--

<210> 9
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 9
tctccccaag 10

<210> 10
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 10
ctccccaagg 10

<210> 11
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 11
tccccaaggc 10

<210> 12
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 12
ccccaaggcg 10

<210> 13
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 13
cccaaggcgc 10

<210> 14
<211> 10
<212> DNA
<213> Artificial Sequence

--3--

<220>
<223> Hypothetical sequence

<400> 14
ccaaggcgca 10

<210> 15
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 15
caaggcgcac 10

<210> 16
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 16
tgcttgccac aggtctcccc aaggcgcaact 30

<210> 17
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 17
aggtctcccc 10

<210> 18
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 18
ggtctcccca 10

<210> 19
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 19
gtctcccaaa 10

<210> 20
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 20
tctcccaag 10

<210> 21
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 21
ctccccaagg 10

<210> 22
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 22
tccccaaggc 10

<210> 23
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 23
ccccaaggcg 10

<210> 24
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 24

--5--

cccaaggcgc 10

<210> 25
<211> 10
<212> DNA
<213> Artificial Sequences

<220>
<223> Hypothetical sequence

<400> 25
ccaaggcgcga 10

<210> 26
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 26
caaggcgcac 10

<210> 27
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 27
caggtctccc 10

<210> 28
<211> 10
<212> DNA
<213> Artificial Sequences

<220>
<223> Hypothetical sequence

<400> 28
gcttgccaca 10

<210> 29
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 29
cttgccacag 10

<210> 30
<211> 10

--6--

<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 30
ttgccacagg 10

<210> 31
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 31
tgccacagg 10

<210> 32
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 32
gccacaggtc 10

<210> 33
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 33
ccacagggtg 10

<210> 34
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 34
cacaggcttc 10

<210> 35
<211> 10
<212> DNA
<213> Artificial Sequence

<220>

--7--

<223> Hypothetical sequence

<400> 35
acaggtctcc 10

<210> 36
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 36
agcttgccac 10

<210> 37
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 37
tgcttgccac 10

<210> 38
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 38
cgcttgccac 10

<210> 39
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 39
ggcttgccac 10

<210> 40
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 40
ctcgatcgg 10

--8--

<210> 41
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 41
 gtagggtag acatcgcgta aaagggcggt acccaggacc ccccttggt caataagtag 60
 cgctggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120
 cttatttaac gaaggtcggg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 42
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 42
 ggtaggggta gacatcgcggt aaaagggggtg taccaggac ccccttggt tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacgg 120
 gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgttta 300

<210> 43
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 43
 ggtaggggta gacatcgcggt aaaagggggtg taccaggac ccccttggt tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacgg 120
 gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttg 300

<210> 44
 <211> 300

--9--

<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 44
ggtaggggta gacatcgcgtaaagggggcg taccaggac ccccttggc tcaataagta 60
gcgctggggg gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacgg 120
gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaataca gattcgtttc 300

<210> 45
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 45
gtaggggtag acatcgcgta aaagggggt acccaggacc ccccttggct caataagtag 60
cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgacggg 120
cttatttaac gaaggctcgg ataagggtgc gaataggctg cagagcggca gctgtccag 180
tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
cactcgacaa ttaggatgt cttcccgaaa gctatcgggt agaataatcag attcgtttaa 300

<210> 46
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 46
gtaggggtag acatcgcgta aaagggggt acccaggacc ccccttggct caataagtag 60
cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgacggg 120
cttatttaac gaaggctcgg ataagggtgc gaataggctg cagagcggca gctgtccag 180
tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
cactcgacaa ttaggatgt cttcccgaaa gctatcgggt agaataatcag attcgttttg 300

<210> 47
<211> 300
<212> DNA
<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 47

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggct caataagtag 60

cgctggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 48

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 48

ggtaggggta gacatcgcgta aaaaggggctg taccaggacc ccccttggc tcaataagta 60

gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120

gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180

gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240

ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgttta 300

<210> 49

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 49

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggct caataagtag 60

cgctggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 50

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

--11--

<400> 50
 ggtaggggta gacatcgcg aaaaggggcg taccaggac ccccttggc tcaataagta 60
 gcgctggggg gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacgg 120
 gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttt 300

<210> 51
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 51
 gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggct caataagtag 60
 cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120
 cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt ctcccgaaa gctatcgggt agaatatcag attcgttttg 300

<210> 52
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 52
 gggtaggggt agacatcgcg taaaaggggc gtaccaggga ccccttggc ctcaataagt 60
 agcgctgggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgacg 120
 ggcttattta acgaaggtcg cyataaggly ccgaataggc tgcagagcgg cagctgtcc 180
 agtgaatgct gtgaggcctc cagctgactc atgagagaag ccagtattc aaactacgat 240
 tccactcgac aatttaggat gtcttccga aagctatcgg gtagaatatc agattcgttt 300

<210> 53
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 53
 ggtaggggta gacatcgcg aaaaggggcg taccaggac ccccttggc tcaataagta 60

--12--

gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gcttatttaa cgaaggctcg gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttg 300

<210> 54
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 54
 gggtaggggt agacatcgcg taaaaggggc gtaccaggga ccccccttgg ctcaataagt 60
 agcgctgggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgcacg 120
 ggcttattta acgaaggctg cgataagggt ccgaataggc tgcagagcgg cagcctgtcc 180
 agtgaatgct gtgaggcttc cagctgactc atgagagaag cccagtattc aaactacgat 240
 tccactcgac aatttaggat gtcttccgga aagctatcgg gtagaatata agattgtagt 300

<210> 55
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 55
 gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggct caataagtag 60
 cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120
 cttatttaac gaaggctcg ataagggtcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgatc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatacag attcgtttaa 300

<210> 56
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 56
 gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggct caataagtag 60
 cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcccatgt 300

<210> 57
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 57
 ggtaggggta gacatcgctg aaaaggggcg taccaggac ccccttggc tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacagg 120
 gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcccatg 300

<210> 58
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 58
 gggtaggggt agacatcgcg taaaaggggc gtaccaggac ccccttggc ctcaataagt 60
 agcgctgggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgacag 120
 ggcttattta acgaaggtcg cgataaggtg ccgaataggc tgcagagcgg cagcctgtcc 180
 agtgaatgct gtgaggcctc cagctgactc atgagagaag cccagtattc aaactacgat 240
 tccactcgac aatttaggat gtcttccga aagctatcgg gtagaatatc agattcccat 300

<210> 59
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 59
 ggtaggggta gacatcgctg aaaaggggcg taccaggac ccccttggc tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacagg 120
 gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180

-- 14 --

gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240

ccactcgaca atttaggatg ttttcccgaa agctatcggg tagaatatca gattcgttta 300

<210> 60

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 60

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggtt caataagtag 60

cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggctcgg ataagggtcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttga 300

<210> 61

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 61

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggtt caataagtag 60

cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggctcgg ataagggtcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 62

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 62

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggtt caataagtag 60

cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggctcgg ataagggtcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

-- 15 --

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 63
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 63
 gttagggtag acatcgcgta aaagggcggt acccaggacc ccccttggct caataagtag 60
 cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120
 cttatttaac gaaggtcgcg ataagggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcccatgt 300

<210> 64
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 64
 ggtaggggta gacatcgcgtaa aaagggggcg taccaggacc ccccttggc tcaataagta 60
 gcgctgggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gcttatttaa cgaaggctcg gataagggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttt 300

<210> 65
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 65
 gttagggtag acatcgcgta aaagggcggt acccaggacc ccccttggct caataagtag 60
 cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120
 cttatttaac gaaggtcgcg ataagggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgttttg 300

-- 16 --

<210> 66
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 66
ggtaggggta gacatcgctg aaaaggggag taccaggac ccccttggc tcaataagta 60
gcgctggggg gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacagg 120
gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcccatg 300

<210> 67
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 67
gggtaggggt agacatcgcg taaaaggggc gtaccaggga ccccttggc ctcaataagt 60
agcgtggggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgacag 120
ggcttattta acgaaggctg cgataagggt ccgaataggc tgcagagcgg cagcctgtcc 180
agtgaatgct gtgaggcttc cagctgactc atgagagaag ccaggtattc aaactacgat 240
tccactcgac aatttaggat gtcttccoga aagctatcgg gtagaatatc agattcggtt 300

<210> 68
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 68
ggtaggggta gacatcgctg aaaaggggag taccaggac ccccttggc tcaataagta 60
gcgctggggg gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacagg 120
gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcggttg 300

<210> 69
<211> 300

<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 69
gggtaggggt agacatcgcg taaaaggggc gtaccagga ccccttgg ctcaataagt 60
agcgctgggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgcacg 120
ggcttattta acgaaggctg cgataagggt ccgaataggc tgcagagcgg cagcctgtcc 180
agtgaatgct gtgaggcttc cagctgactc atgagagaag ccagttattc aaactacgat 240
tccactcgac aatttaggat gtcttccgaa agctatcgg gtagaatatc agattcccat 300

<210> 70
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 70
ggtaggggta gacatcgctg aaaaggggcg taccagga ccccttggc tcaataagta 60
gcgctggggg gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagttattc aaactacgatt 240
ccactcgaca atttaggatg tcttccgaa agctatcggg tagaatatca gattcggtta 300

<210> 71
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 71
gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggct caataagtag 60
cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120
cttatttaac gaaggctcgg ataagggtgc gaataggctg cagagcggca gcctgtccag 180
tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcggttga 300